

GSFC Pre-Certification Test Activity Matrix

Last updated on Feb18, 1998

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Scenario	Task/activity /operation	Traced SV and Acceptance tests	Comments on SV/AT	Status (SV/AT) (2/5/98)	Relevant EGS tests	Relevant Interface tests	Status (EGS/ ICT tests)	Relevant Operations Procedures	Status Ops Procs	Remarks
G-LC-2	Ancillary Ingest and Archive	Unable to locate any tests mapped to G-LC-2		Test not done				TBS		
G-LC-3	MODIS L1A processing and Archive	B090310.030\$G: Purpose: to verify the capability of the GSFC ECS DAAC to extract and analyze associated metadata and generate Level 1A MODIS higher level data products	B090310.030\$G is written at a high level. It should be expanded to incorporate detailed procedural steps.	PGE not available. Test not done	EGS10, EGS11	ICT1		TBS		EGS-10 and EGS-11 need to be expanded to include detailed procedural steps. Overall, this scenario is adequately covered by existing tests.
		B090310.040\$G: Purpose: to verify the capability of the GSFC ECS DAAC to archive Level 0 and 1A higher level MODIS generated data products. Verification is made to ensure that EDOS receives a storage status notice upon completion of the archiving process.	B090310.040\$G is written at a high level. It should be expanded to incorporate detailed procedural steps.							
		B090310.080\$G: Purpose: of this test is to verify the capability of the GSFC ECS DAAC to detect and correct errors that occur during the archiving of the MODIS Level 0 and 1A data and metadata.								
		B090310.070\$G: Purpose: of this test is to verify the capability of the GSFC ECS DAAC to detect and correct errors that occur during the processing of the MODIS Level 0 data and metadata into Level 1A data products.								
		B120440.010\$G: The MODIS Production Planning test procedure verifies that the ECS develops the plans and schedules and coordinates input data needs for generating MODIS products at the GSFC ECS DAAC. This test procedure schedules a full days worth of processing of input Level 0 data from EDOS to create Level 1A MODIS products which, in addition to several static and ancillary files are used as input for generating MODIS Cloud Mask products at the GSFC ECS DAAC.								

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		B120440.040\$G: The MODIS Daily Product Generation and Archiving at the GSFC DAAC test case verifies that the GSFC ECS DAAC generates and archives MODIS Level 1A products, MODIS Level 1B products, and the MODIS Cloud Mask products.	B120440.040\$G needs to be expanded to include detailed procedural steps. These tests cover the scenarios fairly well.							
		B090310.020\$G - The purpose of this test is to verify that the GFSC ECS DAAC validates and formats the ingest MODIS level 0 data in preparation of extracting metadata and generating								Did not see listed in reports by test # as being executed
G-LC-4	MODIS L1A Distribution to MODIS TLCF	B120440.070\$G: The MODIS Product Distribution test case verifies that the ECS processes user requests for MODIS products and distributes the products requested. In this test case, the user already knows which products he/she desires to receive.	End-to-end procedures not available for review	PGE not available. Test not done	EGS10, EGS11	ICT1		TBS		A procedure needs to be developed to cover this scenario in EGS10, EGS11
		B100230.020\$G - Verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products								Did not see listed in reports by test # as being executed
G-LC-5	Science QA of MODIS L1A processing	B100230.020\$G: Verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products.	B100230.020\$G needs expansion to include detailed procedural steps to QA GSFC products.	PGE not available. Test not done	EGS10, EGS11	ICT-1		TBS		ICT-1 covers the DAAC-SCF interface in outline format. Overall, the existing procedures need to be expanded to cover this scenario
		B120440.040\$G: The MODIS Daily Product Generation, Ingest and Archiving at the GSFC DAAC test case verifies that the GSFC DAAC generates and archives MODIS products, including MODIS L0 and L1 products and QA information from the MODIS SCF.								

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		B100230.020\$G: Verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products.								Did not see listed in reports by test # as being executed
G-LC-6	MODIS L1B processing and Archive		B120440.040\$G needs expansion to include detailed procedural steps. Overall, this scenario is adequately covered with the existing tests.	PGE not available. Test not done	EGS11	N/A		TBS		EGS-10 and EGS-11 need expansion to include detailed procedural steps.
		B090310.020\$2 - The purpose of this test is to verify that the GFSC ECS DAAC validates and formats the ingest MODIS level 0 data in preparation of extracting metadata and generating								Did not see listed in reports by test # as being executed
		B120440.010\$G: This test procedure schedules a full days worth of processing of input Level 0 data from EDOS to create Level 1A MODIS products. This Level 1A data is then used as input to the production of Level 1B MODIS products. These products, in addition to several static and ancillary files are used as input for generating MODIS Cloud Mask products at the GSFC ECS DAAC.								Did not see listed in reports by test # as being executed
		B120440.040\$G: The MODIS Daily Product Generation and Archiving at the GSFC DAAC test case verifies that the GSFC ECS DAAC generates and archives MODIS Level 1A products, MODIS Level 1B products, and the MODIS Cloud Mask products.								Did not see listed in reports by test # as being executed

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G-LC-7	MODIS L1B Distribution to MODIS TLCF	B120440.070\$G The MODIS Product Distribution test case verifies that the ECS processes user requests for MODIS products and distributes the products requested. In this test case, the user already knows which products he/she desires to receive.		PGE not available. Test not done	EGS10, EGS11			TBS		A new procedure needs to be developed to cover this scenario
		B100230.020\$G - Verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products.								Did not see listed in reports by test # as being executed
G-LC-8	Science QA of MODIS L1B processing	B100230.020\$G The Product QA test verifies that members of the GSFC DAAC PGS staff can view a list of products requiring QA by the SCF's and can assist the SCF's in conducting QA on those products. This test verifies that the products and there associated metadata are provided to the SCF's when requested. Also verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products.	B100230.020\$G needs expansion to include detailed procedural steps to QA GSFC products.	PGE not available. Test not done	EGS10, EGS11	ICT-1 DAAC-SCF Interface Tests		TBS		ICT-1 covers the DAAC-SCF interface in outline format. Overall, the existing procedures need to be expanded to cover this scenario Did not see listed in reports by test # as being executed
G-LC-9	MODIS Cloud mask Processing and Archive	B090310.110\$G: The purpose of this test is to verify the capability of the GSFC ECS DAAC to extract and analyze associated metadata and generate Cloudmask data products.		PGE not available. Test not done	EGS10, EGS11			TBS		This scenario is adequately covered with existing procedures.
		B090310.120\$G: The purpose of this test is to verify the capability of the GSFC ECS DAAC to archive Cloud mask higher level MODIS generated data products. Verification is made to ensure that EDOS receives a storage status notice upon completion of the archiving process.								

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G-LC-10	Science QA of MODIS Cloud mask Processing	B100230.020\$G The Product QA test verifies that members of the GSFC DAAC PGS staff can view a list of products requiring QA by the SCF's and can assist the SCF's in conducting QA on those products. This test verifies that the products and there associated metadata are provided to the SCF's when requested. Also verified by this test is the GSFC DAACs ability to interface (via email and telephone) with the SCF's QA personnel for product support, use EOSView to help QA products, receive QA reports from the SCF's that contain, at a minimum, product identification, DAAC QA results, storage and processing information, and be able to append these reports to the associated archived data products.		PGE not available. Test not done	EGS10, EGS11	ICT-1		TBS		B100230.020\$G needs to be expanded to include detailed procedural steps to QA cloudmask data . ICT-1 needs expansion to include detailed procedural steps.
G-LC-11	Search, Order, Distribution, and Inspection of MODIS L1A, L1B, and Cloud mask data types	B120440.070\$G The MODIS Product Distribution test case verifies that the ECS processes user requests for MODIS products and distributes the products requested. In this test case, the user already knows which products he/she desires to receive.		PGE not available. Test not done	EGS10, EGS11			TBS		The scenario is adequately covered with the following exceptions: 1) A test case is needed for inspection of data types using the HDF viewer. 2) A test case is needed to cover distribution of data using the subscription service.
		B100110.010\$G This test verifies that ECS is accessible to the users via network connection (TCP/IP or NSI) and direct connection to the EOSDIS Backbone Network (EBNet) connection. Also, this test verifies the user registration process for a ECS client user.	B100110.010\$G needs to be expanded to include detailed procedural steps.							

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		B100110.060\$G This test verifies that ECS has the capability to provide the user with brief concise high-level information about datasets from any point in the system via the Directory search option of the B0SOT.								
		B100110.080\$G This test verifies that ECS has the capability to provide to the user descriptions of data granules that are available for request from the data archive.								
		B100110.090\$G This test verifies that ECS provides the user with the capability to locate and retrieve reduced resolution images of data products.								
		B100110.100\$G This test verifies the ECS provides the user with the capability to view information pertaining to orderable data products and formulate a request for the selected data.								
		B100230.030\$G The Data Search, Browse, Request and Receive test verifies the ability of a user at the MODIS SCF to search the ECS for special L1-L4 products and use the Browse service to view these products.								
		B100130.040\$G This test verifies the interoperability between ECS and the Version 0 System. This test verifies that a Version 0 user can simultaneously access data from GSFC ECS and V0 DAACs.								Did not see listed in reports by test # being executed
		B100130.020\$G This test verifies the interoperability between ECS and the Version 0 System. This test verifies that an ECS user can simultaneously access data from GSFC ECS and V0 DAACs.								
G-LC-12	Request from Hell		No SV/AT test mapped yet.	Test not done	EGS11			TBS		This scenario has to be addressed by EGS11

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G-LC-13	System Administration	B080120.010\$G : To demonstrate a normal startup, operations and shutdown of the ECS site.	The SV/AT tests seem to cover the scenario. As we learn more, we may need to add some more tests.	Not complete	EGS10, EGS11			TBS		There are no comments at this point. The procedures seems to cover the scenarios. EGS10 needs to be enhanced.
		B080130.010\$G: Verify the capability of the DAAC software to integrate a new storage device into the system and prepare to store data to it.								
		B080130.020\$G: This test verifies the ability of the LSM to start up and shut down managed applications.								
		B080140.010\$G: This confirms that the site's standard procedures contain methodology for responding to catastrophic situations.								
		B080140.020\$G: This test confirms the sites ability to restore files.								
		B080150.010\$G: Demonstrate that M&O interfaces, provided for GSFC ECS DAAC subsystems are accessible and functioning and that these interfaces are sufficient to support planned operations and maintenance activities.								
		B080150.020\$G: Demonstrate that interfaces between the ECS Subsystem Servers and their respective M&O Administrative terminal(s) support Maintenance of ECS Data bases.								
		B080160.020\$G: The purpose of the test is to confirm the site's capability to store, archive, and backup data.								
		B080170.010\$G - This test identifies and verifies various interface protocol standards available for communications between various elements of ECS.								
		B080170.030\$G - This test case verifies the capability for the GFSC DAAC to communicate with the LaRC, EDC, NSIDC, SMC, and EOC.								

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		B080170.020\$G - This test case verifies GSFC ECS DAAC connectivity with ECS external systems using the File Transfer Protocol.								Completed initial dry run
		B080170.040\$G - This test case verifies the capability for the GFSC DAAC to communicate with the LaRC, EDC, NSIDC, SMC, and EOC using Electronic Mail Services.								Completed initial dry run
G-LC-14	Commission Algorithm Change SSI&T interface test DAP/SSAP SSI&T Manager	TS0407 This test verifies that the SSIT Database Update GUI updates the PDPS database with the performance information entered by the operator.	SSI&T Manager test completed	Not complete	EGS10			TBS		There are no comments at this point. The procedures seems to cover the scenarios
		TS0460 This test cases verifies that the Algorithm Integration and Test Tool (AITTL) provides the capabilities to subscribe to a Delivery Archive Package (DAP), receive a DAP from the Data Server, and request a DAP to be transferred from the Data Server to the SSI&T environment								
		TS0860.6 The SSI&T Interface Test demonstrates the ability to insert, acquire, and update Data Algorithm Packages (DAP), Science Software Archive Packages (SSAP), Process Generation Executables (PGEEEXE), DAP Ancillary Data, and SSAP updates.								
		TS0405 - This test verifies that the SSIT manager interface conforms to the guidelines in version 5.1 of the ECS user interface style guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) group		?						completed formal run

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G-LC-17	User Registration This scenario exercises: 1) use of ECS Client to register new user; and 2) use of ECS Client to test privileges established for the new user.	TC065 This test covers the creation and testing of privileges for a new user well. The acceptance criteria and expected results cover the creation and testing of privileges for a new user well.	System access verified.	Completed with NCRs	EGS10 EGS7			TBS		EGS10 should be enhanced.
		B100110.010\$G - This test verifies that ECS is accessible to the users via network connection (TCP/IP or NSI) and direct connection to the EOSDIS backbone network (EBNET) connection.								Completed execution.
G-LC-18	Operations, Test, and SSI&T Mode Management	B080810.010\$G Ensure that mode management facilitate execution of modes and maintains logical and operational separation between non-production (test or training) modes and the site production mode. Assume that mode management capabilities allow staff to observe run-time state conditions along with the mode status. Ensure that the test and run time conditions caused by a mode are compatible with the site's production environment and introduces no adverse impacts to planned activities for the site.	The test covers the scenario to some extent.	Test not done yet.	EGS10			TBS		EGS10 should be enhanced to cover his scenario.
G-LC-19	Expedited SSI&T of MODIS PGE change	B100230.010\$G This procedure tests the GSFC DAAC's Science Software Integration and Test Team's (SSITT) ability to install, verify, archive, and report on science software ingested from the MODIS SCF. Next, it verifies the user interfaces between the ECS DAAC and the MODIS SCF supports continued testing and development of science algorithms. Finally, this test verifies the MODIS SCF's ability to search, retrieve, and check-out data and algorithms from the DAAC archive. TS0472	The test seems to cover the scenario.	Test not done yet	EGS10			TBS		EGS10 should be enhanced to cover his scenario.

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		TS0460 - This test verifies that the algorithm integration and test tool (AITTL) provides the capabilities to subscribe to a Delivery Archive Package (DAP), receive a DAP from the data server, and request a DAP to be transferred from the Data Server to the SSI&T environment.								
		TS0860.6 - The SSI&T Interface Test demonstrates the ability to insert, acquire, and update data algorithm package (DAP), Science Software Archive Packages (SSAP), Process Generation Executables (PGEEXE), DAP Ancillary DATA, and SSAP updates								Did not see listed in reports by test # as being executed
		TS0460 - This test verifies that the algorithm integration and test tool (AITTL) provides the capabilities to subscribe to a Delivery Archive Package (DAP), receive a DAP from the data server, and request a DAP to be transferred from the Data Server to the SSI&T environment.								Did not see listed in reports by test # as being executed
		TS0472								Did not see listed in reports by test # as being executed
		TS0405 - This test verifies that the SSIT manager interface conforms to the guidelines in version 5.1 of the ECS user interface style guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) group.								Completed formal run
G-LC-20	Full SSI&T for new MODIS PGE	TS0408 - The data visualization tools provided from the SSIT manager GUI are the COTS product interactive data language and the custom developed product EOSView.		Test not done yet	EGS10			TBS		EGS10 should be enhanced to cover the scenario.

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		TS0860.6 - The SSI&T Interface Test demonstrates the ability to insert, acquire, and update data algorithm package (DAP), Science Software Archive Packages (SSAP), Process Generation Executables (PGEEEXE), DAP Ancillary DATA, and SSAP updates.								
		TS0405 - This test verifies that the SSIT manager interface conforms to the guidelines in version 5.1 of the ECS user interface style guide. This GUI will be checked against a checklist provided by the Human Factors Engineering (HFE) group.								
		TS0406 - This test verifies that a PGE can be registered with the planning and processing systems in the PDPS database.								
		TS0461 - This test case verifies that the AITTL provides the capabilities to create Tar files, containing PGE binaries and scripts, with associated metadata and store them to the science data server.								
		TS0460 - This test verifies that the algorithm integration and test tool (AITTL) provides the capabilities to unsubscribe to a Delivery Archive Package (DAP), receive a DAP from the data server, and request a DAP to be transferred from the Data Server to the SSI&T environment.								
		TS0407 - This test verifies that the SSIT Database Update GUI updates the PDPS database with the performance information entered by the operator								
		TS0472								Did not see listed in reports by test # as being executed
		B100230.010\$G - This procedure tests the GSFC DAAC's science software integration and test team's ability to install, verify, archive, and report on science software ingested from the MODIS SCF.								Did not see listed in reports by test # as being executed